AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) An apparatus for the placement of surgical implements, comprising:

a fixture that defines a plurality of attachment points that are fixed relative to each other;

a plurality of cannulas coupled to the fixture with each of the plurality of cannulas coupled to a respective one of the plurality of attachment points;

at least one trackable marker ~~associated with the plurality of cannulas, the at least one trackable marker~~ mounted on a frame that is coupled to the fixture to enable an instrument location system to detect a position of each of the plurality of cannulas throughout a surgical procedure without obstructing any of the cannulas during the procedure; and

a plurality of surgical implement receivers provided on the fixture for receiving surgical implements, at least one of the plurality of receivers being substantially coaxially aligned with a respective one of the plurality of cannulas to enable a surgical implement to pass through a respective one of the plurality of receivers and a respective one of the plurality of cannulas.

2. (Canceled)

3. (Currently Amended) The apparatus of Claim 1, further comprising:

a peripheral structure, coupled to the fixture~~, for maneuvering~~ to move the fixture and thereby maneuver the plurality of cannulas during a surgical procedure to place the surgical implements.

4. (Currently Amended) The apparatus of Claim [[1]] 3, wherein at least one of the surgical receivers is a flange configured to receive the surgical implements.

5. (Currently Amended) The apparatus of Claim [[1]] 3, wherein at least one of the plurality of cannulas is individually adjustable to vary its length.

6. (Currently Amended) The apparatus of Claim [[1]] 3, wherein at least one of the plurality of cannulas is individually adjustable to vary ~~at least one of its~~ an angular ~~positions~~ position of at least one of the plurality of cannulas relative to the fixture and the peripheral structure.

7. (Original) The apparatus of Claim 6, wherein the at least one angular position is an azimuth angular position measured in a horizontal reference plane associated with the fixture.

8. (Original) The apparatus of Claim 6, wherein the at least one angular position is an elevation angular position measured in a vertical reference plane associated with the fixture.

9. (Currently Amended) The apparatus of Claim [[1]] 3, wherein the fixture is interchangeable from the peripheral structure, and wherein the fixture is configured to accommodate at least one of: a variable number of cannulas, cannulas having a plurality of relative placements, or cannulas having a plurality of fixed relative angles.

10. (Currently Amended) The apparatus of Claim [[4]]3, wherein the peripheral structure is a pistol grip configured graspable handle.

11. (Currently Amended) The apparatus of Claim [[4]]3, wherein the peripheral structure is machine operated ~~means~~.

12. (Currently Amended) The apparatus of Claim [[1]] 3, further comprising:

a plurality of interchangeable frames, at least two of the frames having a different type of trackable marker.

13. (Currently Amended) The apparatus of Claim [[1]] 3, wherein the surgical implement is at least one of a surgical tool or an implant.

14. (Currently Amended) The apparatus of Claim [[1]] 3, wherein at least one of the plurality of cannulas can be interchanged with a cannula having at least one of a different inner diameter or outer diameter.

15. (Currently Amended) The apparatus of Claim [[1]] 3, wherein at least one of the plurality of cannulas is individually adjustable to vary at least one of its inner diameter or outer diameter.

16. (Currently Amended) The apparatus of Claim [[1]] 3, wherein at least one of the plurality of cannulas includes a serrated structure for gripping portions of a patient's anatomy.

17. (Currently Amended) The apparatus of Claim [[1]] 3, wherein the at least one trackable marker is selected from a group comprising a reflective marker, a light emitting marker, an acoustic marker, a magnetic marker, an optical marker, an electromagnetic marker, a radiological marker, and combinations thereof.

18. (Canceled)

19. (Currently Amended) The apparatus of Claim [[1]] 3, wherein the frame is removably coupled relative to the fixture using a dove-tail connection, wherein the dove-tail connection further comprises:

a dovetail connection member having a first planar surface and a second planar surface, wherein the first planar surface and the second planar surface are positioned at an acute angle relative to one another; and

a riser member extending a length and interconnecting the dove-tail connection member and the fixture, to position the dovetail connection member a distance from the fixture.

20.-38. (Canceled)

39. (Currently Amended) An apparatus for the placement of surgical implements, comprising:

a first fixture having a first configuration defined by a plurality of attachment points that are fixed relative to each other and a first frame coupling region;

a second fixture different from the first fixture and having a second configuration defined by a plurality of attachment points that are fixed relative to each other and a second frame coupling region;

a plurality of cannulas operable to be coupled to at least one of the first fixture or the second fixture via the respective plurality of attachment points; and

~~at least one~~ a trackable marker associated with all of the plurality of cannulas, the ~~at least one~~ trackable marker mounted on a single frame, the single frame operable to be selectively coupled to the first frame coupling region of the first fixture or the second frame coupling region of the second fixture, wherein upon coupling the plurality of cannulas with the first fixture or the second fixture, the plurality of cannulas are positioned in at least one of the first configuration or the second configuration, and the ~~at least one~~ trackable marker is detectable by an instrument location system to detect the position of the plurality of cannulas relative to an anatomy in real-time.

40. (Original) The apparatus of Claim 39, wherein the plurality of cannulas are positioned parallel to one another in the first configuration.

41. (Original) The apparatus of Claim 40, wherein the second fixture is operable to enable at least one of the plurality of cannulas to be individually adjustable to vary its angular position relative to the second fixture.

42. (Original) The apparatus of Claim 39, wherein at least one of the plurality of cannulas is individually adjustable to vary its length.

43. (Original) The apparatus of Claim 39, wherein at least one of the plurality of cannulas is individually adjustable to vary at least one of its angular positions.

44. (Currently Amended) The apparatus of Claim [[39]] 56, wherein the at least one trackable marker is selected from a group comprising a reflective marker, a light emitting marker, an acoustic marker, a magnetic marker, an optical marker, an electromagnetic marker, a radiological marker, and combinations thereof.

45. (Currently Amended) The apparatus of Claim [[39]] 56, wherein the surgical implement is at least one of a surgical tool or an implant.

46. (Canceled)

47. (Currently Amended) The apparatus of Claim [[39]] 56, further comprising:

a plurality of interchangeable frames, at least two of the frames having a different type of trackable marker.

48. (Currently Amended) An apparatus for the placement of surgical implements, comprising:

a fixture that includes a pistol grip configured grasping handle and a plurality of attachment points that are fixed relative to each other;

a plurality of cannulas each coupled to a respective one of the plurality of attachment points of the fixture so that manipulation of the pistol grip configured grasping handle maneuvers the plurality of cannulas simultaneously and the plurality of cannulas are independently adjustable relative to the fixture;

a plurality of trackable markers coupled to the fixture;

a surgical navigation system that tracks the plurality of trackable markers to determine a position of each of the plurality of cannulas relative to an anatomy; and

a display that displays an icon representative of the position of each of the plurality of cannulas superimposed onto an image of the anatomy.

49. (Previously Presented) The apparatus of Claim 48, further comprising:

a plurality of surgical implement receivers provided on the fixture for receiving surgical implements, at least one of the plurality of receivers being substantially coaxially aligned with a respective one of the plurality of cannulas.

50. (Previously Presented) The apparatus of Claim 49, further comprising:

an imaging device operable to acquire one or more images of the anatomy.

51. (Previously Presented) The apparatus of Claim 48, wherein the fixture is interchangeable and is configured to accommodate at least one of: a variable number of cannulas, a plurality of cannulas having a plurality of placements relative to the fixture, or a plurality of cannulas having a plurality of fixed relative angles.

52. (Previously Presented) The apparatus of Claim 1, further comprising:

a display that displays an icon representative of the position of each of the plurality of cannulas overlaid onto an image of the anatomy.

53. (Previously Presented) The apparatus of Claim 48, wherein the display also displays a plurality of icons that each represent a projected trajectory for each of the plurality of cannulas superimposed onto the image of the anatomy.

54. (Previously Presented) The apparatus of Claim 3, wherein the peripheral structure is fixed relative to the plurality of attachment points.

55. (New) The apparatus of Claim 51, wherein the pistol grip configured grasping handle includes an elongated member operable to be grasped by a hand of a user;

wherein the elongated member extends at an angle of less than 180 degrees relative to a long axis of any of the plurality of the cannulas coupled to the fixture.

56. (New) The apparatus of Claim 39 wherein the first frame coupling region and the second frame coupling region are substantially similar and operable to both couple with the frame individually.

57. (New) The apparatus of Claim 56 wherein the first frame coupling region and the second frame coupling region both further comprise:

a dovetail connection member having a first planar surface and a second planar surface, wherein the first planar surface and the second planar surface are positioned at an acute angle to one another; and

a riser member extending a length and interconnecting the dovetail connection member and the fixture, to position the dovetail connection member a distance from the fixture.